

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Demuth, et al.

EXAMINER:

SERIAL NO.: 09/\_\_\_\_

ART UNIT:

FILED: December \_\_, 2000 (HEREWITH)

FOR: COMPOUNDS OF UNSTABLE PEPTIDASE IV INHIBITORS

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CERTIFICATE OF MAILING

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By: Renee M. Mason-Salewala

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COMMISSIONER OF PATENTS AND TRADEMARKS  
WASHINGTON, DC 20231

Sir:

**PRELIMINARY AMENDMENT**

Prior to examining the above-entitled patent application and before calculating the filing fees, please make the following amendments:

**In The Specification:**

On the 1<sup>st</sup> page following the title and before Field of The Invention, please insert the following:

--The present application is claiming priority of DE 19828114.5 filed on June 24, 1998 and subsequent PCT EP 99/04381 application filed on June 24, 1999.--

**In the Claims:**

1. (AMENDED) Compounds of inhibitors of the enzymatic activity of dipeptidyl peptidase IV (DP IV), which compounds have the general formula A-B-C, wherein

A is an amino acid

B is a chemical bond between A and C or is an amino acid, and

C is an unstable inhibitor of DP IV[, namely a dipeptidyl alkyl ketone derivative, with a fluoro alkyl ketone derivative being exempted from the dipeptidyl alkyl ketone derivatives, a dipeptidyl chloroalkyl ketone, dipeptidyl cyanide or a dipeptidyl pyridinium methyl ketone radical].

2. (AMENDED) Compounds according to claim 1, [characterised in that] wherein B is selected from the group consisting of proline, hydroxyproline, thiazolidinecarboxylic acid, dehydroproline, pipecolic acid, azetidinecarboxylic acid or aziridinecarboxylic acid.

3. (AMENDED) Compounds according to claim 1 [or 2, characterised in that] wherein, B is proline or hydroxyproline.

4. (AMENDED) Compounds according to claim 1 [any one of the preceding claims, characterised in that] wherein said unstable inhibitor is a[the] dipeptide [group]derivative having an active carbonyl group at the C-terminus selected form the group consisting of is Ile-Thia, Ile-Pyr, Val-Thia or Val-Pyr.

5. (AMENDED) Compounds according to claim 1 [any one of the preceding claims, characterised in that] wherein [the] said inhibitors are present in salt form.

6. (AMENDED) Compounds according to claim 1[any one of the preceding claims, characterised in that the] wherein said inhibitors are present as organic salts such as acetates, succinates, tartrates or fumarates or inorganic acid radicals such as phosphates or sulphates.

7. (AMENDED) Compounds according to claim 1 [any one of the preceding claims, characterised in that] wherein A-B is a dipeptide of formula Ile-Pro or Gly-Pro and C is a dipeptidyl alkyl ketone derivative.

8. (AMENDED) Compounds according to claim 1 wherein said compounds comprise a p[P]harmaceutical composition [especially] for oral administration, [characterised in that it comprises at least one compound according at any one of the preceding claims optionally in combination with] wherein said composition comprises customary pharmaceutical carriers or excipients.

9. (AMENDED) A method of preparing[Use of compounds or pharmaceutical compositions according to any one of the preceding claims in the preparation of] a [medicament] pharmaceutical composition for the temporally controlled *in vivo* enzymatic inhibition of DP IV comprising providing a compound of the general formula A-B-C, wherein

A is an amino acid

B is a chemical bond between A and C or is an amino acid, and

C is an unstable inhibitor of DP IV.

10. (AMENDED) The method of claim 9 wherein said compound is directed to [Use of compounds or pharmaceutical compositions according to any one of claims 1 to 7 in] cell-, tissue- or organ-specific enzymatic inhibition of DP IV.

11. (AMENDED) A method of treating[Use of compounds or pharmaceutical compositions according to any one of claims 1 to 7 in the treatment of] disorders in mammals that can be treated by modulating the DP IV enzymatic activity of a mammal comprising the step of administering to said mammal a compound of the general formula A-B-C, wherein

A is an amino acid

B is a chemical bond between A and C or is an amino acid, and

C is an unstable inhibitor of DP IV.

12. (AMENDED) The method of claim 11 wherein said compounds are used to treat [Use according to claim 10 in the treatment of] metabolic disorders in humans.

13. (AMENDED) The method of claim 11 wherein said compounds are used to treat [Use according to claim 10 in the treatment of] impaired glucose tolerance, glucosuria, hyperlipidaemia, metabolic acidoses, obesity, diabetes mellitus, diabetic neuropathy and nephropathy and sequelae of diabetes mellitus in mammals.

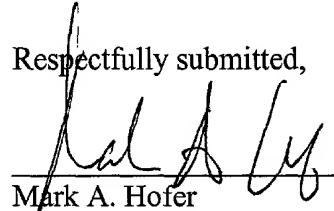
14. (NEWLY ADDED) A compound of claim 1 wherein said unstable inhibitors are selected from a group consisting of a dipeptidyl alkyl ketone derivative, with a fluoro alkyl ketone derivative being exempted from the dipeptidyl alkyl ketone derivatives, a dipeptidyl chloroalkyl ketone, dipeptidyl cyanide or a dipeptidyl pyridinium methyl ketone radical.

REMARKS

No new matter has been added as a result of the above-presented amendments.

The Applicants respectfully request expeditious consideration and allowance of the present application. The Examiner is invited and encouraged to telephone the undersigned if such would serve the furtherance of the prosecution of the present application.

Respectfully submitted,



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